



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

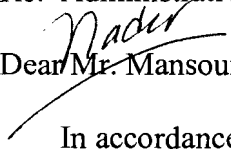
**75 Hawthorne Street
San Francisco, CA 94105-3901**

April 21, 2006

Nader Mansour
Vice President
Mountainview Power Company, LLC
PO Box 800
2244 Walnut Grove Ave.
Rosemead, CA 91770

**IN REPLY AIR-3
REFER TO: SE 04-01**

Re: Administrative Amendment to PSD Permit SE 04-01 for Mountainview Power Company


Dear Mr. Mansour:

In accordance with the provisions of the Clean Air Act, as amended (42 U.S.C. 7401 et seq.), the Environmental Protection Agency (EPA) has reviewed your request of April 12, 2006 to modify your PSD permit as initially issued by the South Coast Air Quality Management District (SCAQMD) on May 24, 2001 for the construction and operation of a natural gas-fired power plant in Redlands, CA, and as revised by the EPA on May 20 and December 22, 2005.

You have requested that the PSD permit for Mountainview Power Company, LLC (MVP) be revised to delete Condition X.D.2, which requires setting and maintaining the fuel injection timing of emergency internal combustion engine, D61, at 4 degrees retard. After reviewing MVP's request, EPA has determined that the requested permit revision is justified because the emergency engine, D61, is equipped with an Electronic Control Module that automatically controls the fuel injection. Condition X.D.2 is therefore unwarranted, as it is impossible for MVP to manually set the injection timing on this engine. Because this Condition was included in the permit in error, and because there will be no change in emissions or air impacts, EPA considers the permit amendment to be administrative in nature and not subject to public review requirements. Therefore, EPA hereby amends the permit as requested. This amendment to the permit shall take effect immediately.

If you have any questions regarding this matter, please contact Kathleen Stewart of our Permits Office at (415) 947-4119.

Sincerely,



Deborah Jordan
Director, Air Division

Enclosure


PERMIT MODIFICATION
MOUNTAINVIEW POWER COMPANY, LLC

SE 04-01 (Modification #3)

The May 24, 2001 PSD permit originally issued to Mountainview Power Company, LLC by the South Coast Air Quality Management District for the construction and operation of a natural gas-fired power plant in Redlands, CA, and as revised by the EPA on May 20, 2005 and November 22, 2005, is hereby modified, in accordance with the application submitted and the Federal regulations governing the Prevention of Significant Air Quality Deterioration (40 C.F.R. 52.21) and other conditions attached to this document and made a part of this approval. This amendment is effective immediately. A copy of the revised PSD permit follows.

Failure to comply with any condition or term set forth in this approval will be grounds for enforcement action pursuant to Section 113 of the Clean Air Act.

4-21-06
Date


Deborah Jordan
Director, Air Division
U.S. EPA, Region IX

PERMIT CONDITIONS
Mountainview Power Company, LLC
PSD Permit (SE 04-01)

I. Permit Expiration

This Authority to Construct shall become invalid (1) if construction is not commenced (as defined in 40 CFR 52.21(b)(8)) within 18 months after the approval takes effect, (2) if construction is discontinued for a period of 18 months or more, or (3) if construction is not completed within a reasonable time.

II. Notification of Commencement of Construction and Startup

The EPA Regional Administrator shall be notified in writing of the anticipated date of initial startup (as defined in 40 CFR 60.2) of each facility postmarked not more than sixty (60) days nor less than thirty (30) days prior to such date, and shall be notified in writing of the actual date of commencement of construction and startup within fifteen (15) days after such date.

III. Facility Operation

All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Authority to Construct shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions.

IV. Malfunction

A. Reporting

The EPA Regional Administrator shall be notified by electronic mail transmission at r9.aeo@epa.gov within two (2) working days following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in emissions above any allowable emission limit stated in Conditions X-F of this Authority to Construct. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. The notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time

over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under Conditions X-F of these conditions, and the methods utilized to mitigate emissions and restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulation that such malfunction may cause, except as provided for in Conditions IV-B of this permit.

B. Treatment of Emissions

1. Definition of malfunction: A malfunction means a sudden and reasonably unforeseeable breakdown of equipment or of a process beyond the control of the source requiring immediate corrective action to restore normal operation.
2. Emissions in excess of the limits in Conditions X-F of this permit shall constitute a violation and may be the subject of enforcement proceedings.
3. All emissions, including those associated with a malfunction which may be eligible for an affirmative defense, must be included in all emissions calculations and demonstrations of compliance with mass emission limits in Conditions X-F.
4. This provision is in addition to any emergency or malfunction provision contained in any applicable requirement or elsewhere in this permit.

V. Right to Entry

The EPA Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or an authorized representative, upon the presentation of credentials, shall be permitted:

- A. to enter the premises where the source is located or where any records are required to be kept under the terms and conditions of this Authority to Construct; and
- B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Authority to Construct; and
- C. to inspect any equipment, operation, or method required in this Authority to Construct; and
- D. to sample emissions from the source(s).

VI. Transfer of Ownership

In the event of any changes in control or ownership of the facilities to be constructed, the Authority to Construct shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Authority to Construct and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator and the State and local Air Pollution Control Agency within 30 days of change in ownership.

VII. Severability

The provisions of this Authority to Construct are severable, and, if any provision of the Authority to Construct is held invalid, the remainder of this Authority to Construct shall not be affected thereby.

VIII. Other Applicable Regulations

The owner and operator of the proposed facility shall construct and operate the proposed stationary source in compliance with all other applicable provisions of all other applicable federal, state, and local air quality regulations, including, but not limited to 40 CFR Parts 52, 60, and 61.

IX. Paperwork Reduction Act

Any requirements established by this permit for the gathering and reporting of information are not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because this permit is not an "information collection request" within the meaning of 44 USC. §§ 3502(4) & (11), 3507, 3512, and 3518. Furthermore, this permit and any information gathering and reporting requirements established by this permit are exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons, 44 USC. §§ 3502(4) & (11); 5 CFR Part 1320.5(a).

X. Special Conditions

A. Certification

The Permittee shall notify the EPA Regional Administrator in writing of compliance with Conditions X.C.1 and X.E.1 below, and shall make such notification within fifteen (15) days of such compliance. The letter must be signed by the Responsible Official.

B. Equipment List

The following emission units are subject to one or more condition in this Authority to Construct:

Unit ID #	Description
D18	Gas Turbine: Natural gas GE 7241FA combined cycle with 1991 MMBTU/hr dry low NOx combustors, 175.7 MW electrical generator, Heat Recovery Steam Generator, 209.2 MW steam turbine shared with unit D27
D27	Gas Turbine: Natural gas GE 7241FA combined cycle with 1991 MMBTU/hr dry low NOx combustors, 175.7 MW electrical generator, Heat Recovery Steam Generator, 209.2 MW steam turbine shared with unit D18
D36	Gas Turbine: Natural gas GE 7241FA combined cycle with 1991 MMBTU/hr dry low NOx combustors, 175.7 MW electrical generator, Heat Recovery Steam Generator, 209.2 MW steam turbine shared with unit D45
D45	Gas Turbine: Natural gas GE 7241FA combined cycle with 1991 MMBTU/hr dry low NOx combustors, 175.7 MW electrical generator, Heat Recovery Steam Generator, 209.2 MW steam turbine shared with unit D36
D21	135 MMBTU/hr natural gas duct burner
D30	135 MMBTU/hr natural gas duct burner
D39	135 MMBTU/hr natural gas duct burner
D48	135 MMBTU/hr natural gas duct burner
D58	Internal Combustion Engine, emergency fire, lean burn, diesel fuel, Clarke, model JW6H-UF60, fuel injection timing retard, with aftercooler, turbocharger, 375 BHP
D61	Internal Combustion Engine, emergency power, lean burn, diesel fuel, Caterpillar, model 3512B, automatic fuel injection with aftercooler/turbocharger, 2,155 BHP
C24	Selective Catalytic Reduction system, with 2750 cubic feet total catalyst volume, 25'6"x72'x1'6" with ammonia injection
C33	Selective Catalytic Reduction system, with 2750 cubic feet total catalyst volume, 25'6"x72'x1'6" with ammonia injection
C42	Selective Catalytic Reduction system, with 2750 cubic feet total catalyst volume, 25'6"x72'x1'6" with ammonia injection
C51	Selective Catalytic Reduction system, with 2750 cubic feet total catalyst volume, 25'6"x72'x1'6" with ammonia injection

C. Air Pollution Control Equipment/Operation

1. On or before the date of startup of the facility and thereafter (as defined in 40 CFR 60.2), the Permittee shall install, continuously operate, and

maintain Selective Catalytic Reduction (SCR) systems to minimize emissions at or below the levels specified in Conditions X-F of this Authority to Construct.

[Devices subject to this condition: D18, D27, D36, D45]

2. During a turbine startup, ammonia injection must be initiated as soon as the selective catalytic reduction system catalyst temperature exceeds 480 degrees F and the ammonia vaporizer outlet temperature has been at least 495 degrees F for a period of 30 minutes.

[Devices subject to this condition: D18, D27, D36, D45]

D. Fuel Use and Operating Conditions

1. The operator shall limit the operating time to no more than 199 hour(s) in any one year.

[Devices subject to this condition: D61, D58]

2. The operator shall set and maintain the fuel injection timing of the engine at 9.7 degrees retarded relative to standard timing.

[Devices subject to this condition: D58]

E. Monitoring

1. Prior to the date of startup and thereafter, the Permittee shall install, maintain, and operate a Continuous Emissions Monitoring System (CEMS) to measure the stack gas NO_x concentration in ppmv. The concentration shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall meet EPA monitoring performance and quality assurance specifications of 40 CFR Part 60, Appendix B and Appendix F, and 40 CFR Part 75.

[Devices subject to this condition: D18, D21, D27, D30, D36, D39, D45, D48]

2. The Permittee must operate the CEMS during startups and shutdowns.

3. The operator shall operate and maintain this equipment according to the following specifications:

A data acquisition system shall be installed and maintained to monitor and record the combined NO_x emissions in pounds per hour from all gas turbines, Devices D18, D27, D36, and D45 and their respective Duct Burners, Devices D21, D30, D39 and D48, whenever at least one gas turbine is in startup mode. This data shall be used to determine compliance with permit conditions X.F.2, X.F.3, and X.F.5.

[Devices subject to this condition: D18, D21, D27, D30, D36, D39, D45, D48]

4. To comply with Condition X.D.1, the operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

[Devices subject to this condition: D61, D58]

5. The operator shall install and maintain a(n) continuous monitoring system to accurately indicate the ammonia injection rate of the ammonia injection system.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[Devices subject to this condition: C24, C33, C42, C51]

6. The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the SCR catalyst.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[Devices subject to this condition: C24, C33, C42, C51]

7. The operator shall install and maintain a(n) pressure gauge to accurately indicate the pressure across the SCR catalyst bed in inches water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

[Devices subject to this condition: C24, C33, C42, C51]

8. For the purpose of the following condition number(s), continuous monitoring shall be defined as measuring at least once every 15 minutes, except during periods of routine maintenance and calibration.

Condition Number X.E.5

[Devices subject to this condition: C24, C33, C42, C51]

F. Emission Limits

1. Emissions from each of the gas turbines shall not exceed 14.15 lb/hr or 2.0 ppmv NO_x, averaged over 60 minutes at 15% oxygen, dry, except as allowed in conditions X.F.1.a, X.F.1.b, X.F.1.c, and X.F.1.d.
 - a. The 2.0 ppmv NO_x emission limit(s) shall not apply during a start-up. Total start-up time shall not exceed 4 hours per one day, except for a cold startup or combustor tuning activities, which shall not exceed 6 hours per day. For purposes of this permit, a cold startup shall be defined as a startup of a gas turbine after the steam turbine has been shut down for 72 hours or more.
 - b. The 2.0 ppmv NO_x emissions limit(s) shall not apply during a gas turbine shutdown event. For purposes of this permit, a gas turbine shutdown event shall be defined as the period beginning with the inability to comply with the 2.0ppmv limit after initiation of the combustion turbine shutdown sequence and ending either with 1) the cessation of firing of the combustion turbine, or 2) when the unit ramps back up after an aborted shutdown, to the attainment of minimum load.

- c. The 2.0 ppmv NO_x emission limit(s) shall not apply during the commissioning period. The commissioning period shall not exceed any of the following:
 - i. 1272 total combined operations hours for a pair of gas turbines which serve a common steam turbine from the time of initial startup (as defined in 40 CFR 60.2);
 - ii. 180 consecutive days from the time of initial startup (as defined in 40 CFR 60.2);
 - iii. 60 consecutive days from the date the maximum production rate is achieved.

The operator shall provide the EPA with written notification of the initial start-up date within 2 weeks of the startup.

- d. The 2.0 ppmv NO_x emission limit(s) shall not apply to the first fifteen 1-hour average NO_x emissions above 2.0 ppmv, dry basis at 15% O₂, in any rolling 12-month period for each combustion gas turbine provided that it meets the requirements of conditions X.F.1.d.A, X.F.1.d.B, X.F.1.d.C, and X.F.1.d.D below.
 - A. This equipment operates under any one of the following qualified conditions.
 - a) Rapid combustion turbine load changes due to the following conditions: 1) Load changes initiated by the California ISO or a successor entity when the plant is operating under the Automatic Generation Control; or 2) Activation of a plant automatic safety or equipment system which rapidly decreases turbine load.
 - b) The first two 1-hour reporting periods following the initiation/shutdown of an evaporative cooler.
 - c) The first two 1-hour reporting periods following the initiation/shutdown of HRSG duct burners.
 - d) Events as the result of technological limitation identified by the operator and approved in writing

by the EPA.

- B. The 1-hour average NO_x emissions above 2.0 ppmv, dry basis at 15% O₂, did not occur as a result of operator neglect; improper operation or maintenance; or the tampering with, interfering with, altering, or adjusting any equipment in any way which conceals or disguises the type and quantity of emissions.
- C. The qualified operating conditions described in condition X.F.1.d.A above are recorded in the plant's operating log within 24 hours of the event, and in the CEMS by 5 p.m. the next business day following the qualified operating condition. The notations in the log and CEMS must describe the data and time of entry into the log/CEMS and the plant operating conditions responsible for NO_x emissions exceeding the 2.0 ppmv 1-hour average limit.
- D. The 1-hour average NO_x concentration for periods that result from a qualified operating condition does not exceed 25 ppmv, dry basis at 15 percent O₂.

All NO_x emissions during these events shall be included in all calculations of hourly, and annual mass emission rates as required by this permit.

[Devices subject to this condition: D18, D27, D36, D45]

- 2. The following limits shall apply during start-up and combustor tuning events:

Emission Limit	Averaging Time	Operation Requirements
80 lbs/hr	1 Hour	The 80 lbs/hr emission limit shall apply to combustor tuning. Combustor tuning activity shall not exceed 6hrs/day. The operator shall notify the EPA within 2 weeks of combustor tuning activity.
160 lbs/hr	3 Hour	The 160 lbs/hr emission limit shall apply to a single turbine during startups. Startup time shall not exceed 4 hours/day, except for a cold startup which shall not exceed 6 hours per day. For purposes of this permit, a cold startup shall be defined as a startup of a gas turbine after the steam turbine has been shut down for 72 hours or more.
70 lbs/shutdown	30 minutes	The 70 lb/shutdown emission limit shall apply to a single gas turbine during a shutdown which shall not exceed 30 minutes per event.
600 lbs/startup	6 Hour	The 600 lbs/startup emission limit shall apply to a single gas turbine during a cold startup which shall not exceed 6 hours per day.
400 lbs/startup	4 Hour	The 400 lbs/startup emission limit shall apply to a single gas turbine during a startup other than a cold startup. Startup time shall not exceed 4 hours /day.
320 lbs/hr	1 Hour	The 320 lbs/hr emission limit shall only apply whenever a turbine is in any startup mode. For the purposes of this condition, the limit shall be based on the total combined emissions from the 4 turbines devices D18, D27, D36, D45 and their respective Duct Burners, devices D21, D30, D39, and D48.

[Devices subject to this condition: D18, D21, D27, D30, D36, D39, D45, D48]

3. Maximum daily emissions shall not exceed 3419 lb/day NOx for all four turbines combined, on a calendar day average.

[Devices subject to this condition: D18, D21, D27, D30, D36, D39, D45, D48]

4. Startup and shutdown time for all four gas turbines combined shall not exceed 3008 hours per year.

[Devices subject to this condition: D18, D27, D36, D45]

5. Combined annual emissions from all four gas turbines, including all periods of startup, shutdown, and combustor tuning, shall not exceed 275.9 tons/year, based on a 12-month rolling average.

[Devices subject to this condition: D18, D21, D27, D30, D36, D39, D45, D48]

G. Performance Tests

1. The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted to determine the NO_x emissions using EPA methods 1-4 and 7E measured over a 60 minute averaging period. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from EPA.

The test shall be conducted within 60 days after achieving the maximum production rate, but no later than 180 days after initial start-up (as defined in 40 CFR 60.2), and annually thereafter (within 30 days of the anniversary of the initial performance test). Upon written request from the Permittee (Attn: Air-5), and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity.

The EPA shall be notified of the date and time of the test at least 30 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the test shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine generating output (MW).

For the initial source test, the test shall be conducted when this equipment is operating at or near loads of 100 percent, 75 percent, and 50 percent of maximum load. For the annual source tests, the test shall be conducted when this equipment is operating at or near maximum load.

The test shall be conducted in accordance with an EPA approved source test protocol. The protocol shall be submitted to the EPA no

later than 45 days prior to the proposed test date and shall be approved by the EPA before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the test, the identity of the testing lab, and a description of all sampling and analytical procedures.

H. Recordkeeping and Reporting

1. The Permittee must maintain a file of all measurements, including continuous monitoring systems evaluations; all continuous monitoring systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; performance and all other information required by this permit and 40 CFR 60 Appendices A-B and 40 CFR 75, recorded in a permanent form suitable for inspection. The file must be retained for five years following the date of such measurements, maintenance, reports, and records.
2. The Permittee must submit a written report of all excess emissions to EPA for every calendar quarter. The report must include the following:
 - a. The magnitude of the excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, the date and time of commencement, and compilation of each time period of excess emissions.
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of any equipment. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted must also be reported.
 - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.
 - d. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information must be stated in the report.
 - e. Excess emissions shall be defined as any 1-hour period during which the average emissions of NO_x, as measured by the CEMS exceeds the maximum emission limits set forth in Condition X.F.

3. The operator shall provide to the EPA a source test report in accordance with 40 CFR 60, Parts 60.8 and Appendix A and the following specifications:

Source test results shall be submitted to the EPA no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 15 percent oxygen, dry basis.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

Emission data shall be expressed in terms of mass rate (lbs/hr).

Source test results shall also include turbine fuel flow rate under which the test was conducted.

Source test results shall also include turbine and generator output under which the test was conducted.

Source test results shall also include exhaust gas moisture content under which the test was conducted.

Emission data shall be expressed in terms of lbs/MM cubic feet.

[Devices subject to this condition: D18, D27, D36, D45]

4. The operator shall keep records, in a manner approved by the EPA, for the following parameter(s) or item(s):

Date of operation, the elapsed time in hours, and the reason for operation. Records shall be kept and maintained on file for a minimum of five years and made available to EPA personnel upon request.

[Devices subject to this condition: D61, D58]

5. The operator shall keep records, in a manner approved by the EPA, for the following parameter(s) or item(s):

Facility log indicating date, number of operating hours and fuel consumed for each turbine and duct burner during the commissioning period.

Facility log documenting all start-ups, shutdowns, and combustor tuning events. The log shall indicate the date, type, time and duration of each event.

Data acquired as specified in condition X.E.3 for turbine start-ups.

Records shall be kept and maintained on file for a minimum of five years and made available to EPA personnel upon request.

[Devices subject to this condition: D18, D21, D27, D30, D36, D39, D45, D48]

6. For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated based on the average of the continuous monitoring for that hour.

Condition Number X.E.5

Condition Number X.E.6

Condition Number X.E.7

[Devices subject to this condition: C24, C33, C42, C51]

I. New Source Performance Standards

The facility's combustion turbines are subject to the federal New Source Performance Standards (NSPS) - 40 CFR Part 60, Subpart GG, as well as the General Provisions of Subpart A. The owner/operator shall meet the applicable requirements of the aforementioned NSPS Subparts.

XI. Agency Notification

All correspondence as required by this Authority to Construct shall be forwarded to EPA at the following address:

- A. Director, Air Division (Attn: Air-1)
U.S. Environmental Protection Agency, Region 9

75 Hawthorne Street
San Francisco, CA 94105

- B. Chief, Stationary Source Division
California Air Resources Board
1001 "I" Street
P.O. Box 2815
Sacramento, CA 95812
- C. Executive Officer
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, CA 91765

